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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 866,379	05/24/2001	Jay M. Short	DIVER1370-7	4596

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EXAMINER

RAMIREZ, DELIA M

ART UNIT PAPER NUMBER

1652

DATE MAILED: 12/27/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/866,379

Applicant(s)

SHORT ET AL.

Examiner

Delia M. Ramirez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-90 is/are pending in the application.
- 4a) Of the above claim(s) 1-59 and 65-90 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 60-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1,12
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Status of the Application

Claims 1-90 are pending.

Applicant's election without traverse of Group XIV, claims 60-64 drawn to a method for improving the nutritional value of foodstuff using the polypeptide of SEQ ID NO: 10, in Paper No. 14, filed on 11/19/2002 is acknowledged.

Submission of a new Sequence Listing and CRF, an amendment to Figure 8, and amendments to the specification in Paper No. 14, filed on 11/19/2002 are acknowledged.

It is noted that some of the elected claims are still partially drawn to non-elected inventions. Examination of such claims will be restricted to the subject matter elected, which in the instant case is a method of improving the nutritional value of foodstuff using the polypeptide of SEQ ID NO: 10. Applicants are requested to amend the claims accordingly in response to this Office Action.

Claims 1-59 and 65-90 are withdrawn from further consideration by the Examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Specification

1. The use of the trademarks has been noted throughout this application. See particularly page 141. They should be capitalized wherever they appear and be accompanied by the generic terminology.

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Although the use of trademarks is permissible in patent applications, the proprietary nature of the trademarks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

2. The specification is objected to for not complying with sequence rules. The newly submitted Sequence Listing (paper and CRF) contains sequences which are not supported by the specification as originally filed. See 37 CFR 1.825(a). Applicants argue that the newly submitted Sequence Listing only attempts to correct an omission of two residues (169 and 278) in SEQ ID NO: 10. Applicants have indicated that SEQ ID NO: 10 represent a variant of SEQ ID NO: 8 of identical length (432 amino acids; paragraph 2 of Remarks), however, the newly submitted Sequence Listing indicates that SEQ ID NO: 8 and 10 are not of the same length. SEQ ID NO: 10 contains 436 amino acids whereas SEQ ID NO: 8 contains 432. In addition, amended Figure 8 does not correspond with what is being disclosed in the Sequence Listing since according to Figure 8, SEQ ID NO: 10 contains only 432 amino acids. Furthermore, the newly submitted Sequence Listing also amends SEQ ID NO: 5 and SEQ ID NO: 6, however it is not clear from the Remarks where one can find support for such amendment or the reasons why such amendment was needed. While Applicants have indicated that a miscalculation of the nucleotides in SEQ ID NO: 7 required the amendment to the Sequence Listing, it is not clear from the Remarks what was miscalculated.

Priority

3. Acknowledgment is made of a claim for domestic priority under 35 U.S.C. 120 or 121 to US application No. 09/580,515 filed on 05/25/2000, 09/318,528 filed on 05/25/1999,

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09/291,931 filed on 04/13/1999, 09/259,214 filed on 03/01/1999, and 08/910,798 filed on 08/13/1997.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 9/13/2002 is acknowledged. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

5. The drawings have been reviewed and are objected under 37 CFR 1.84 or 1.152. See attached Notice of Draftsperson's Patent Drawing Review. Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application. In addition, if amendments to the specification are needed due to drawing corrections, Applicant is requested to submit such amendments while the case is being prosecuted to expedite the processing of the application.

Claim Objections

6. Claim 60 is objected to because it depends upon a non-elected claim. It is noted that the claim as written refers to "a polypeptide of claim 15". As indicated in previous Office Action Paper No. 11, mailed on 8/13/2002, the term "a polypeptide of claim 15" has been interpreted as "a polypeptide of claim 59" since the subject matter of claim 15 is not a polypeptide. It is

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suggested that the term "an amino acid sequence of a polypeptide of claim 15" be deleted and the term "the amino acid sequence of SEQ ID NO: 10" be inserted after the term "having".

Appropriate correction is required.

7. Claim 61 is objected to because it is partially drawn to non-elected subject matter, i.e. a method of improving the nutritional value of foodstuff using the polypeptide of SEQ ID NO: 8 (encoded by the polynucleotide of SEQ ID NO: 7). It is suggested that part (c) be deleted.

Appropriate correction is required.

Claim Rejections - 35 USC § 112, First Paragraph

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 60-64 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection.

10. Applicants have submitted a new Sequence Listing which, according to Applicants does not introduce new matter since it is only intended to correct an omission of two residues (169 and 278) in SEQ ID NO: 10.

11. Claims 60-64 are directed to a method for improving the nutritional value of foodstuff by using the polypeptide of SEQ ID NO: 10 or the polypeptide encoded by the polynucleotide of SEQ ID NO: 9. While Figure 8 as originally filed discloses SEQ ID NO: 8 and 10 as

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polypeptides of 432 amino acids each, and the specification discloses the polypeptide of SEQ ID NO: 10 as being a variant of the polypeptide of SEQ ID NO: 8, there is no support in the specification for the amended SEQ ID NO: 10, which now discloses a polypeptide of 436 amino acids. As indicated above, Applicants have stated in Paper No. 14 that SEQ ID NO: 10 represents a variant of SEQ ID NO: 8 of identical length (432 amino acids; paragraph 2 of Remarks), however, the newly submitted Sequence Listing does not support such assertion since SEQ ID NO: 8 and 10 are not of the same length. SEQ ID NO: 10 contains 436 amino acids whereas SEQ ID NO: 8 contains 432. Also, there is no indication as to why SEQ ID NO: 10 now contains 4 additional amino acids nor there is support for such extra amino acids. Furthermore, it is not clear which miscalculation of SEQ ID NO: 7 is being referred to in Paper No. 14 that would explain the need to amend the Sequence Listing. Since the polypeptide of SEQ ID NO: 10 as originally filed is not the same as that of the amended SEQ ID NO: 10, claims 60-64 are no longer directed to a method of use of the polypeptide of SEQ ID NO: 10 as originally filed but to a different polypeptide which has not been described. Thus, one of skill in the art cannot reasonably conclude that Applicant was in possession of the claimed invention at the time the application was filed.

Double Patenting

12. It is noted that the application Serial No. 10/156,660 discloses a polynucleotide which encodes the polypeptide of SEQ ID NO: 10 of the instant application and also discloses a polypeptide which is 100% sequence identical to the polypeptide of SEQ ID NO: 10 of the instant application. Since application Serial No. 10/156,660 is not available to the examiner at

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this time, no determination has been made as to whether or not a double patenting rejection should be applied to the claims of the instant application. If, upon availability of the above application to the examiner, it is determined that there are conflicting claims between application Serial No. 10/156,660 and the instant application, double patenting will not be considered as new ground(s) of rejection.

Conclusion

13. No claim is in condition for allowance.
14. It is noted that the prior art search has been carried out using the newly submitted CRF. If new ground(s) of rejection have to be introduced in the next Office Action as a result of a new search due to changes in the Sequence Listing, such Action will be considered final.
15. Applicants are requested to submit a clean copy of the pending claims (including amendments, if any) in future written communications to aid in the examination of this application.
16. Certain papers related to this application may be submitted to Art Unit 1652 by facsimile transmission. The FAX number is (703) 308-4556. The faxing of such papers must conform with the notices published in the Official Gazette, 1156 OG 61 (November 16, 1993) and 1157 OG 94 (December 28, 1993) (see 37 CFR 1.6(d)). NOTE: If Applicant submits a paper by FAX, the original copy should be retained by Applicant or Applicant's representative. NO DUPLICATE COPIES SHOULD BE SUBMITTED, so as to avoid the processing of duplicate papers in the Office.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delia M. Ramirez whose telephone number is (703) 306-0288.

The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Ponnathapura Achutamurthy can be reached on (703) 308-3804. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Delia M. Ramirez, Ph.D.
Patent Examiner
Art Unit 1652

DR
December 18, 2002

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PRIMARY EXAMINER
GROUP 1800
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